AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-29 (canceled).

Claim 30 (previously presented): A magnetic field generator to be used in an environment in which the magnetic field generator is exposed to a radiation at an absorbed dose of at least 3,000 Gy, the magnetic field generator comprising:

a plurality of permanent magnets that are arranged substantially in a C or U shape so as to define a magnetic field generating space; and

additional magnets for changing the strength of the magnetic field to be generated in the magnetic field generating space; wherein

each of the plurality of permanent magnets includes R (which is at least one of the rare-earth elements), B (boron), TM (which is at least one transition element and includes Fe), and inevitably contained impurity elements and is a sintered magnet having a composition of:

25.0 mass% to 40.0 mass% of R;

0.8 mass% to 1.2 mass% of B;

inevitably contained impurity elements; and

TM as the balance;

each of the plurality of permanent magnets have been magnetized to a permeance coefficient of 0.5 or more and has a coercivity H_{cJ} of 1.6 MA/m or more;

the plurality of permanent magnets include:

a first magnet and a second magnet, which face each other with the magnetic field generating space interposed;

a third magnet and a fourth magnet, which are arranged so as to sandwich the first magnet between them; and

a fifth magnet and a sixth magnet, which are arranged so as to sandwich the second magnet between them;

the first and second magnets are arranged along a line that passes a center portion of the magnetic field generating space and that is parallel to a magnetic field direction in the center portion;

the size of the third magnet as measured perpendicularly to the second plane is smaller than that of the fourth magnet as also measured perpendicularly to the second plane;

the size of the fifth magnet as measured perpendicularly to the second plane is smaller than that of the sixth magnet as also measured perpendicularly to the second plane;

a magnet assembly made up of the permanent magnets is substantially symmetric with respect to a first plane including the line, but is asymmetric with respect to a second plane that includes the line but that crosses the first plane at right angles;

at least a portion of the outer periphery of the magnet assembly is covered with a ferromagnetic material; and

the additional magnets form a moving magnetic circuit portion, which couples magnetically to at least some of the permanent magnets, and are supported such that their positions relative to the magnetic field generating space are changeable.

Claim 31 (previously presented): The magnetic field generator of claim 30, wherein the moving magnetic circuit portion includes a plurality of magnets as its members, the magnets being movable horizontally.

Claim 32 (currently amended): The magnetic field generator of ~~29~~claim 30, wherein the permanent magnets further include a seventh magnet, which is located between the fourth and sixth magnets.

Claim 33 (currently amended): The magnetic field generator of claim ~~24~~30, further comprising a mechanism for keeping the temperature of the permanent magnets lower than room temperature.

Claim 34 (currently amended): The magnetic field generator of claim ~~27~~30, wherein a ferromagnetic body, which changes its thickness according to a distance from the second plane, is provided on each of opposed surfaces of the first and second magnets.

Claim 35 (currently amended): The magnetic field generator of claim ~~24~~30, wherein each of the permanent magnets has a rectangular parallelepiped shape.

Claim 36 (currently amended): A particle accelerator comprising

the magnetic field generator of claim ~~24~~30, and

a shielding plate with a thickness of at least 0.1 mm, which is provided between the magnetic field generator and a source of a radiation.